FIG. 1(a)

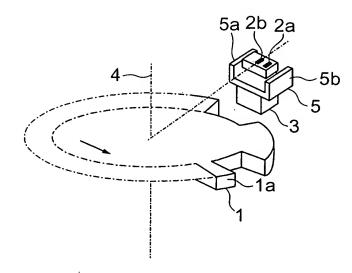


FIG. 1(b)

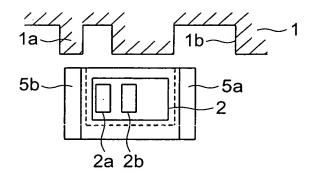
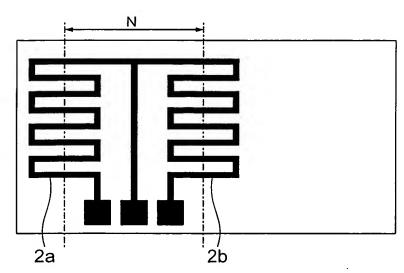
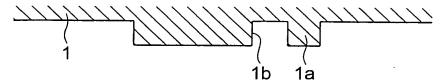
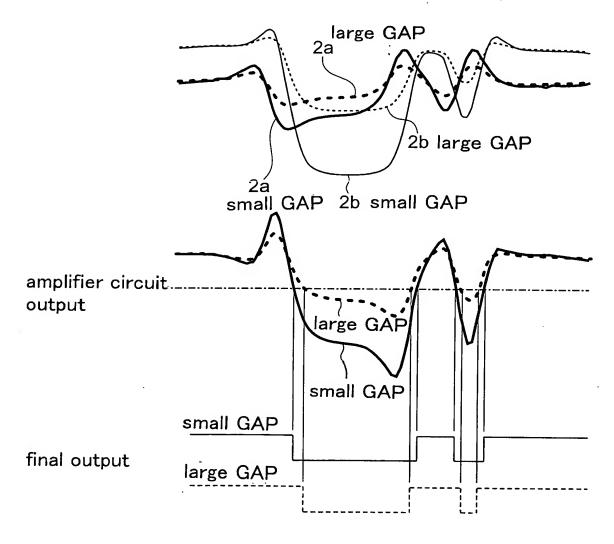


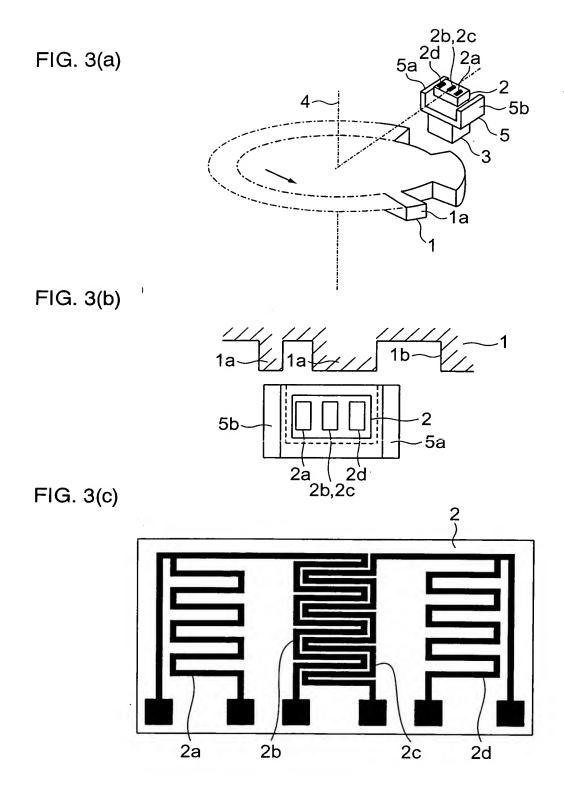
FIG. 1(c)

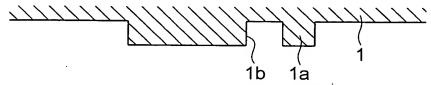




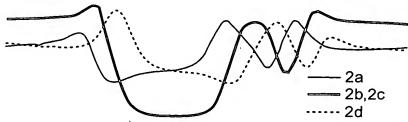
resistance value of magnetoresistive segments 2a, 2b







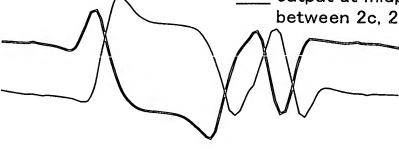
resistance value of magnetoresistive segments 2a, 2b,2c,2d



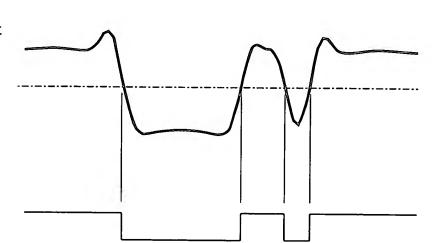
output at midpoint between 2a, 2b output at midpoint between 2c, 2d

output at midpoint between 2a, 2b output at midpoint

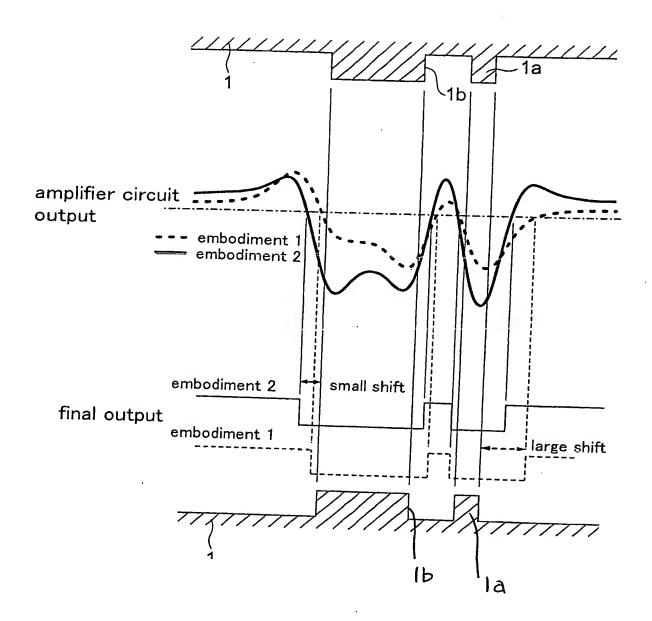
between 2c, 2d



differential amplifier output



final output



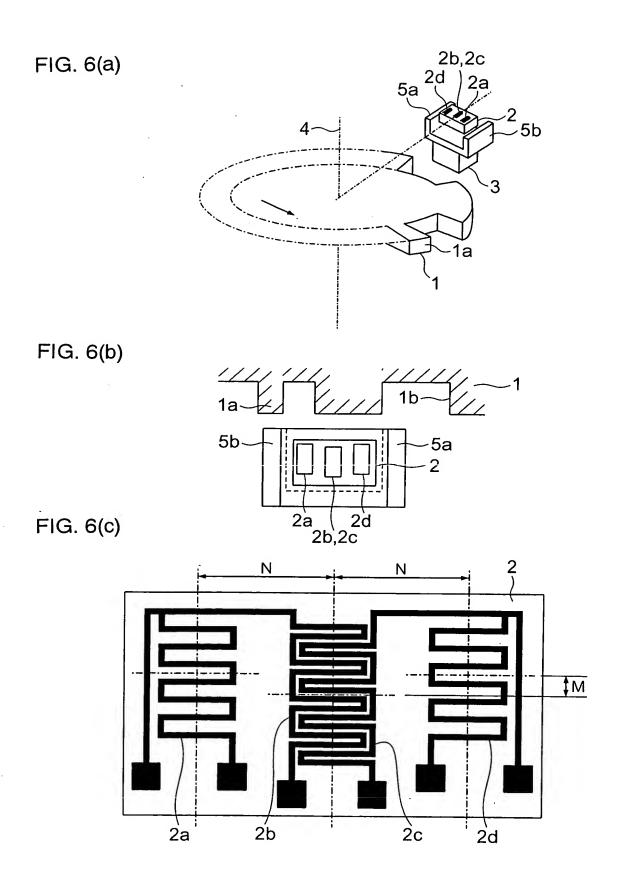


Fig. 7

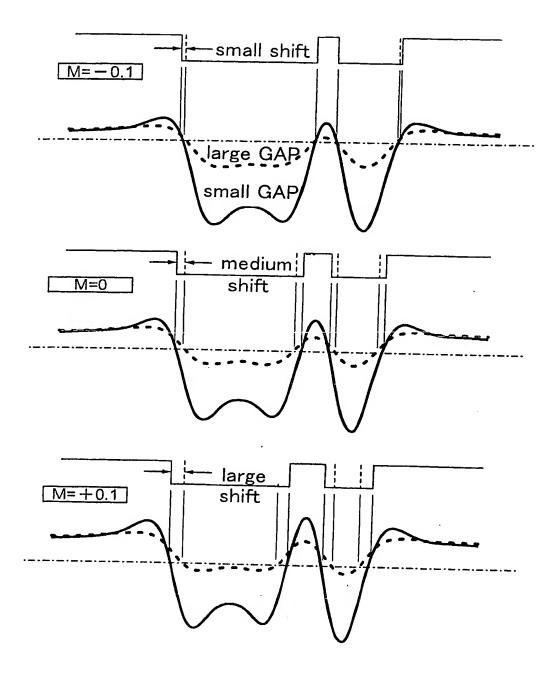


Fig. 8

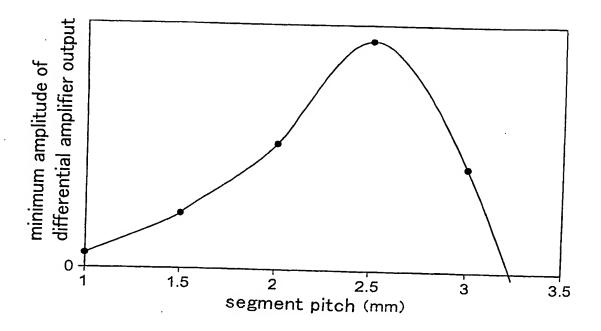


Fig. 9

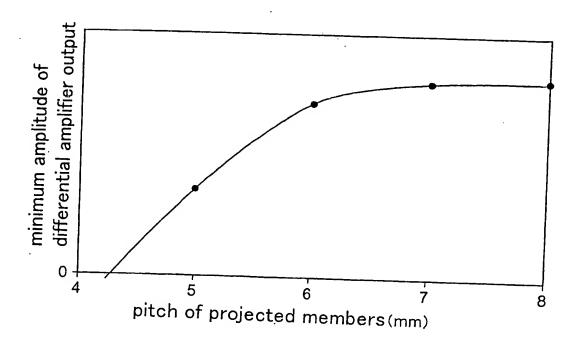


Fig. 10

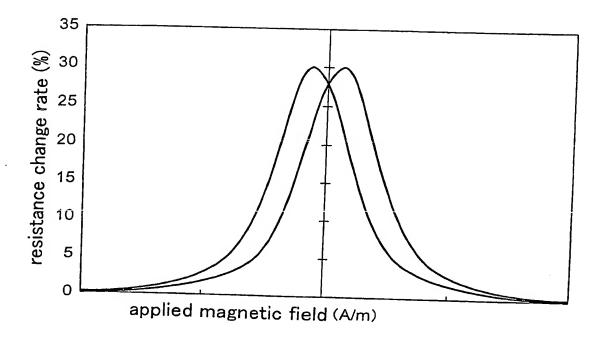


FIG. 11



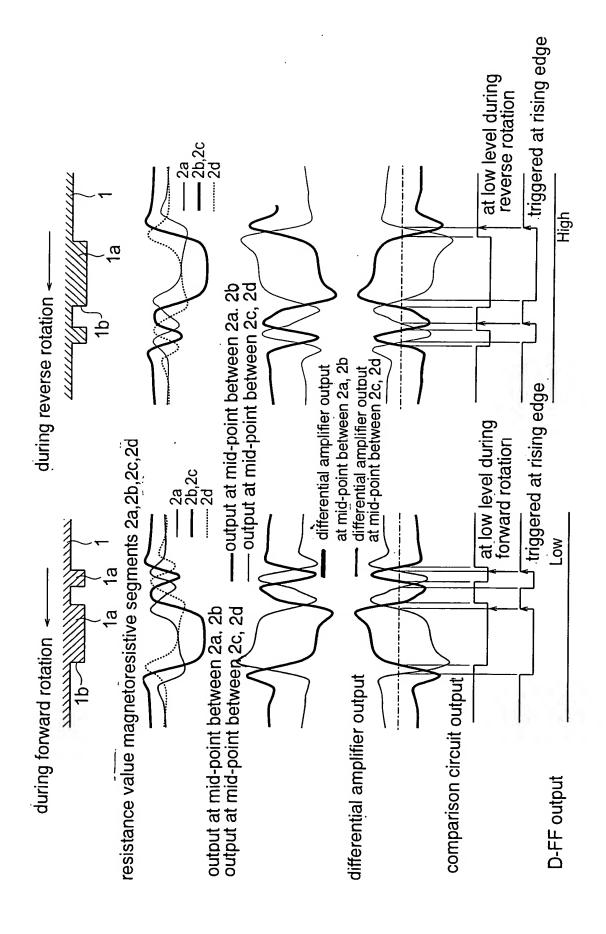


FIG. 13(a)

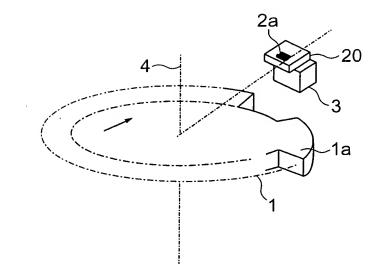
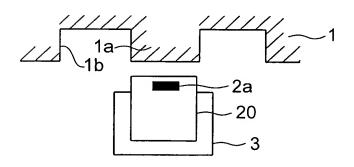
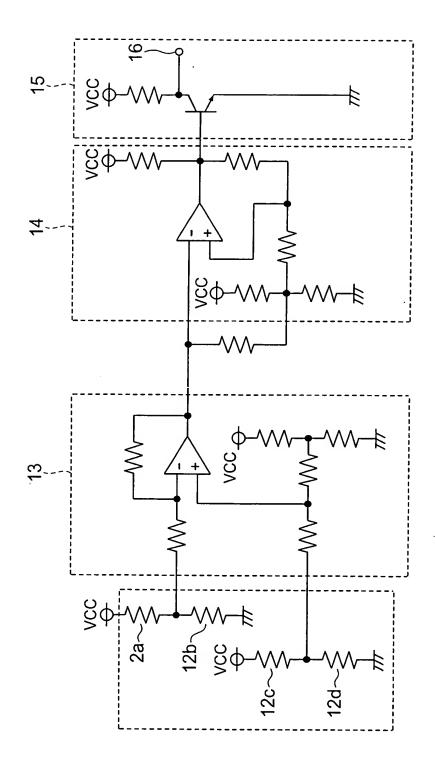
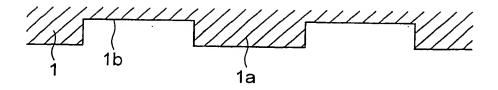


FIG. 13(b)







resistance value of magnetoresistive segment 2a

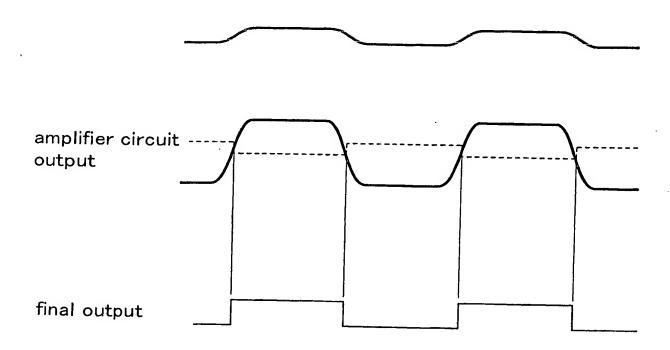


FIG. 16(a)

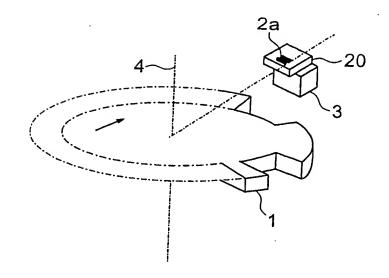
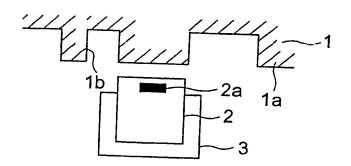
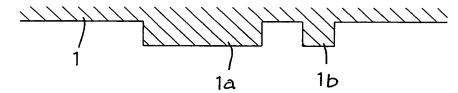


FIG. 16(b)

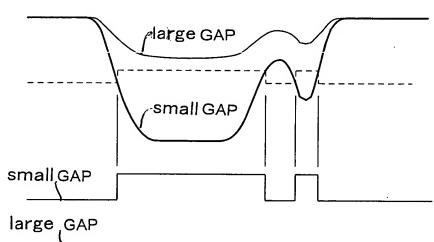




resistance value of magnetoresistive segment 2a



amplifier circuit output



,final output